



## Protecting Iowans from the West Nile Virus

Summer always means outdoor fun, family picnics, and too often, mosquitos.

Before the West Nile virus, mosquitos were just a minor, yet itchy, annoyance. This new threat doesn't have to mean the end of summer fun. If we each take a few common sense steps we can better protect ourselves and our families from the West Nile virus.

I recently invited Dr. Steve Ostroff, Deputy Director for Infectious Diseases at Centers for Disease Control and Prevention (CDC) to visit Iowa and to discuss the threat of the West Nile virus. While no Iowan has yet come down with West Nile, Dr. Ostroff pointed out that it's not a matter of if an Iowan will become infected, but when.

"I think the likelihood, given what we're seeing in areas very close to [Iowa], make it likely that if not this year than certainly in subsequent years there will be some human illness," Ostroff said.

As of mid-August, the West Nile virus has been detected in 52 Iowa counties and human infections have been diagnosed in both Missouri and Illinois.

The CDC provided Iowa with \$270,000 to help boost local efforts to combat the West Nile virus. These funds will be used for bird and mosquito collection and testing, surveillance of humans and horses, and to develop education material so Iowans can better protect themselves.

For now, information is the best defense against West Nile. I hope these questions and answers about the virus from the CDC will help you protect yourself and your family.

### **Q. What is West Nile encephalitis?**

A. "Encephalitis" means an inflammation of the brain and can be caused by viruses and bacteria, including viruses transmitted by mosquitoes. West Nile encephalitis is an infection of the brain caused by West Nile virus, a flavivirus commonly found in Africa, West Asia and the Middle East. It is closely related to the St. Louis encephalitis virus found in the United States.

### **Q. How many cases of West Nile encephalitis in humans have occurred in the U.S.?**

A. In 1999, 62 cases of severe disease, including seven deaths, occurred in the New York area. In 2000, 21 cases were reported, including two deaths in the New York City area. In 2001, there were 66 human cases of severe disease and nine deaths. No reliable estimates are available for the number of cases of West Nile encephalitis that occur worldwide.

### **Q. How is it transmitted?**

A. Mosquitoes become infected when they feed on infected birds, which may circulate the virus in their blood for a few days. Infected mosquitoes can then transmit West Nile virus to humans and animals while biting to take blood. The virus is located in the mosquito's salivary glands. During blood feeding the virus may be injected into the animal or human, where it may multiply, possibly causing illness.

### **Q. If I live in an area where birds or mosquitoes with West Nile virus have been reported and a mosquito bites me, am I likely to get sick?**

A. No. Even in areas where the virus is circulating, very few mosquitoes are infected with the virus. Even if the mosquito is infected, less than one percent of people who become bitten and become infected will get severely ill. The chances you will become severely ill from any one mosquito bite are extremely small.

### **Q. Who is at risk for getting West Nile encephalitis?**

A. All residents of areas where virus activity has been identified are at risk of getting West Nile encephalitis; persons over 50 years of age have the highest risk of severe disease. It is unknown if those with weakened immune systems are at increased risk.

### **Steps you can take to reduce your risk of becoming infected with West Nile virus:**

- Stay indoors at dawn, dusk, and in the early evening;
- Wear long-sleeved shirts and long pants whenever you are outdoors;
- Spray clothing with repellents containing permethrin or DEET since mosquitoes may bite through thin clothing;
- Apply insect repellent sparingly to exposed skin. An effective repellent will contain 35% DEET (N,N-diethyl-meta-toluamide). DEET in high concentrations (greater than 35%) provides no additional protection;
- Whenever you use an insecticide or insect repellent, be sure to read and follow the manufacturer's DIRECTIONS FOR USE, as printed on the product.
- Install or repair window and door screens so that mosquitoes cannot get indoors.

For more information, visit the Centers for Disease Control and Prevention at <http://www.cdc.gov> or my Web site at <http://harkin.senate.gov>